



PCT09

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/743,885A

DATE: 05/02/2002
TIME: 17:07:38

Input Set : A:\743885seq.mar.txt
Output Set: N:\CRF3\05022002\I743885A.raw

p.6

3 <110> APPLICANT: CREEMERS, Jantina
4 ANGENENT, Gerrit
5 KATER, Martin
7 <120> TITLE OF INVENTION: Process to collect metabolites from modified nectar by
8 insects
10 <130> FILE REFERENCE: U-13212-4
12 <140> CURRENT APPLICATION NUMBER: 09/743885A
13 <141> CURRENT FILING DATE: 2001-01-16
15 <160> NUMBER OF SEQ ID NOS: 29
17 <170> SOFTWARE: PatentIn Ver. 2.1
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 265
21 <212> TYPE: PRT
22 <213> ORGANISM: Petunia x hybrida
24 <220> FEATURE:
25 <223> OTHER INFORMATION: strain: W115
27 <220> FEATURE:
28 <223> OTHER INFORMATION: tissue type: nectar gland
30 <220> FEATURE:
31 <223> OTHER INFORMATION: NEC1 amino acid sequence
33 <400> SEQUENCE: 1
34 Met Ala Gln Leu Arg Ala Asp Asp Leu Ser Phe Ile Phe Gly Leu Leu
35 1 5 10 15
37 Gly Asn Ile Val Ser Phe Met Val Phe Leu Ala Pro Val Pro Thr Phe
38 20 25 30
40 Tyr Lys Ile Tyr Lys Arg Lys Ser Ser Glu Gly Tyr Gln Ala Ile Pro
41 35 40 45
43 Tyr Met Val Ala Leu Phe Ser Ala Gly Leu Leu Tyr Tyr Ala Tyr
44 50 55 60
46 Leu Arg Lys Asn Ala Tyr Leu Ile Val Ser Ile Asn Gly Phe Gly Cys
47 65 70 75 80
49 Ala Ile Glu Leu Thr Tyr Ile Ser Leu Phe Leu Phe Tyr Ala Pro Arg
50 85 90 95
52 Lys Ser Lys Ile Phe Thr Gly Trp Leu Met Leu Leu Glu Leu Gly Ala
53 100 105 110
55 Leu Gly Met Val Met Pro Ile Thr Tyr Leu Leu Ala Glu Gly Ser His
56 115 120 125
58 Arg Val Met Ile Val Gly Trp Ile Cys Ala Ala Ile Asn Val Ala Val
59 130 135 140
61 Phe Ala Ala Pro Leu Ser Ile Met Arg Gln Val Ile Lys Thr Lys Ser
62 145 150 155 160
64 Val Glu Phe Met Pro Phe Thr Leu Ser Leu Phe Leu Thr Leu Cys Ala
65 165 170 175

ENTERED

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/743,885A

DATE: 05/02/2002
TIME: 17:07:38

Input Set : A:\743885seq.mar.txt
Output Set: N:\CRF3\05022002\I743885A.raw

67 Thr Met Trp Phe Phe Tyr Gly Phe Phe Lys Lys Asp Phe Tyr Ile Ala
68 180 185 190
70 Phe Pro Asn Ile Leu Gly Phe Leu Phe Gly Ile Val Gln Met Leu Leu
71 195 200 205
73 Tyr Phe Val Tyr Lys Asp Ser Lys Arg Ile Asp Asp Glu Lys Ser Asp
74 210 215 220
76 Pro Val Arg Glu Ala Thr Lys Ser Lys Glu Gly Val Glu Ile Ile Ile
77 225 230 235 240
79 Asn Ile Glu Asp Asp Asn Ser Asp Asn Ala Leu Gln Ser Met Glu Lys
80 245 250 255
82 Asp Phe Ser Arg Leu Arg Thr Ser Lys
83 260 265
87 <210> SEQ ID NO: 2
88 <211> LENGTH: 221
89 <212> TYPE: PRT
90 <213> ORGANISM: Petunia x hybrida
92 <220> FEATURE:
93 <223> OTHER INFORMATION: strain: W115
95 <220> FEATURE:
96 <223> OTHER INFORMATION: tissue type: nectar gland, secretory cell
98 <220> FEATURE:
99 <223> OTHER INFORMATION: FBP15 amino acid sequence
101 <400> SEQUENCE: 2
102 Met Gly Arg Gly Lys Ile Glu Ile Lys Arg Ile Glu Asn Thr Thr Asn
103 1 5 10 15
105 Arg Gln Val Thr Phe Cys Lys Arg Arg Asn Gly Leu Leu Lys Lys Ala
106 20 25 30
108 Tyr Glu Leu Ser Val Leu Cys Asp Ala Glu Val Ala Leu Ile Val Phe
109 35 40 45
111 Ser Ser Arg Gly Arg Leu Tyr Glu Tyr Ala Asn Asn Ser Val Lys Ala
112 50 55 60
114 Thr Ile Asp Arg Tyr Lys Lys Ala Ser Ser Asp Ser Ser Asn Thr Gly
115 65 70 75 80
117 Ser Thr Ser Glu Ala Asn Thr Gln Phe Tyr Gln Gln Glu Ala Ala Lys
118 85 90 95
120 Leu Arg Val Gln Ile Gly Asn Leu Gln Asn Ser Asn Arg Asn Met Leu
121 100 105 110
123 Gly Glu Ser Leu Ser Ser Leu Thr Ala Lys Asp Leu Lys Gly Leu Glu
124 115 120 125
126 Thr Lys Leu Glu Lys Gly Ile Ser Arg Ile Arg Ser Lys Lys Asn Glu
127 130 135 140
129 Leu Leu Phe Ala Glu Ile Glu Tyr Met Arg Lys Arg Glu Ile Asp Leu
130 145 150 155 160
132 His Asn Asn Asn Gln Met Leu Arg Ala Lys Ile Ala Glu Ser Glu Arg
133 165 170 175
135 Asn Val Asn Met Met Gly Gly Glu Phe Glu Leu Met Gln Ser His Pro
136 180 185 190
138 Tyr Asp Pro Arg Asp Phe Phe Gln Val Asn Gly Leu Gln His Asn His
139 195 200 205

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/743,885A

DATE: 05/02/2002

TIME: 17:07:38

Input Set : A:\743885seq.mar.txt

Output Set: N:\CRF3\05022002\I743885A.raw

141 Gln Tyr Pro Arg Gln Asp Asn Met Ala Leu Gln Leu Val
 142 210 215 220
 146 <210> SEQ ID NO: 3
 147 <211> LENGTH: 18
 148 <212> TYPE: PRT
 149 <213> ORGANISM: Calluna vulgaris
 151 <220> FEATURE:
 152 <223> OTHER INFORMATION: tissue type: flower
 154 <220> FEATURE:
 155 <223> OTHER INFORMATION: Calluna vulgaris signal peptide
 157 <400> SEQUENCE: 3
 158 Met Phe Leu Pro Ile Leu Phe Thr Ile Ser Leu Leu Phe Ser Ser Ser
 159 1 5 10 15
 161 His Ala
 166 <210> SEQ ID NO: 4
 167 <211> LENGTH: 1205
 168 <212> TYPE: DNA
 169 <213> ORGANISM: Petunia x hybrida
 171 <220> FEATURE:
 172 <223> OTHER INFORMATION: strain: W115
 174 <220> FEATURE:
 175 <223> OTHER INFORMATION: tissue type: nectar gland
 177 <220> FEATURE:
 178 <223> OTHER INFORMATION: NEC1
 180 <400> SEQUENCE: 4
 181 tcgagcggcc gcccggcag gtattcaaca agagtattca ccacttgaac tcaaaagggg 60
 182 cttcactaaa aaaaaatcat ggcgcaatta cgtgctgatg acttgtctt catatttggc 120
 183 cttcttggta atattgtatc attcatggtc ttcccttagcac ccgtgccaac attttacaaa 180
 184 atatataaaa ggaaatcatc agaaggatata caagcaatac catatatggt agcactgttc 240
 185 agcgccggac tattgtata ttatgcttat ctcaggaaga atgcctatct tatgtcagc 300
 186 attaatggct ttggatgtgc cattgaatta acatatatct ctctgtttct cttttacgcg 360
 187 cccagaaaagt ctaagattt cacagggtgg ctgatgtct tagaattggg agccctagga 420
 188 atgggtatgc caattactta ttatttagca gaaggctcac atagagtat gatagtggga 480
 189 tggatttgcg cagctatcaa tggatgtgc ttgtgtctc ctttaagcat catgaggcaa 540
 190 gtaataaaaaa caaagagtgt agagttcatg cccttcactt tatctttgtt cctcaactctc 600
 191 tgtgccacta tgtggtttt ctatgggtt ttcaagaagg acttttacat tgcgtttcca 660
 192 aataatactgg gctttctatt cggaatcgat caaatgtat tatattttgt ttacaaggat 720
 193 tcaaagagaa tagatgtat aaaaatctgt cctgttcgag aagctacaaa ataaaaagaa 780
 194 ggtgtagaaa tcattatcaa cattgaagat gataattctg ataacgcatt gcagtccatg 840
 195 gagaaggatt ttccagact gcggacatca aaataagcaa gaagatgtatc aaaaaatgac 900
 196 aaagctaagg agtttgcgtt aaggcaagga acttgcacat gaatatctaa gctaattagc 960
 197 aagacttttag cagcttgcgtt tattttgtt ttgtgagggtt ttaccttata attagcttgc 1020
 198 agcatagcct tcccactaat aattctgtt agcgaatctt atatatggga aataacttaca 1080
 199 ctagtatgca tcttcttatc acatgtttgg cacttgacta tacatagaaa aattaacaag 1140
 200 catttctcac ctcaattttgtt cacttactta taagtagctt aataatataa tgcaattttc 1200
 201 acccc 1205
 204 <210> SEQ ID NO: 5
 205 <211> LENGTH: 1157
 206 <212> TYPE: DNA

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/743,885A

DATE: 05/02/2002
TIME: 17:07:38

Input Set : A:\743885seq.mar.txt
Output Set: N:\CRF3\05022002\I743885A.raw

207 <213> ORGANISM: Petunia x hybrida
209 <220> FEATURE:
210 <223> OTHER INFORMATION: strain: W115
212 <220> FEATURE:
213 <223> OTHER INFORMATION: tissue type: nectar gland
215 <220> FEATURE:
216 <223> OTHER INFORMATION: cDNA library of nectaries from Petunia hybrida
217 flowers
219 <220> FEATURE:
220 <223> OTHER INFORMATION: FBP15
222 <400> SEQUENCE: 5
223 tctgaatacaca agctgtgtgt gtagagagat ttcataaaaga cagcaaacat cccttctttt 60
224 tggctgttt taaaaggttcc cttcttcaac cagctctttt cctcatcagg gtaagttgca 120
225 aataaaagggg atgttccaga atcaagaaga gaagatgtca gactcgcctc agagaagat 180
226 gggaaagagga aagattgaga ttaagaggat tgaaaataca acaaattcgtc aagtcaactt 240
227 ctgttaagaga agaaaatgggt tgcttaaaaaa agctttagaa ctttctgttc tttgtatgc 300
228 tgaagttgct ctcatcgaaa tctcaagccg tggccgcctc tatgaatatg ctaacaacag 360
229 tggtaaggca acaattgata gatataagaa agcatcctca gattcctcca acactggatc 420
230 tacttctgaa gctaacaactc agttttatca acaagaagct gccaaactcc gagttcagat 480
231 tggtaactta cagaactcaa acaggaacat gctaggcgag tctctaagtt ctctgactgc 540
232 aaaagatctg aaaggcctgg agaccaaact tgagaaaagga attagtagaa ttagtccaa 600
233 aaagaatgaa ctcctgtttt ctgagattga gtatatgcgaa aaaaggggaaa ttgatttgca 660
234 caacaacaat cagatcgccc gggcaaagat agctgagagat gaaagaaaatg tgaacatgat 720
235 gggaggagaa ttggagctga tgcaatctca tccgtacgtt ccaagagact tcttccaagt 780
236 gaacggctta cagcataatc atcaaatatcc acgccaagac aacatggctc ttcaattatg 840
237 ataagtttat aataaaatgc atggtttggaa gcactctgtat tgggtggat ttggattatg 900
238 tataagggag tgcaggccat ttgccaattt ttgaaaaggta ctcaaacagg aagtgttcaaga 960
239 agttcatcat ctctctcatc tataatgtctt aacaaaagtc ttagctttag gactctaaaa 1020
240 caaagactta atttaacata taaatataat tggtaatgc tgggttattt tatggatgt 1080
241 atccaaaaaac attaataacc tatcttttc ttcaaattat gtctcctttt atacaaacta 1140
242 ctaacatatt ttcttat 1157
245 <210> SEQ ID NO: 6
246 <211> LENGTH: 54
247 <212> TYPE: DNA
248 <213> ORGANISM: Calluna vulgaris
250 <220> FEATURE:
251 <221> NAME/KEY: sig_peptide
252 <222> LOCATION: (1)..(54)
254 <400> SEQUENCE: 6
255 atgtttcttc caattcttcc caccatttcc ctccctttctt cctccccc tgc 54
258 <210> SEQ ID NO: 7
259 <211> LENGTH: 2141
260 <212> TYPE: DNA
261 <213> ORGANISM: Petunia x hybrida
263 <220> FEATURE:
264 <223> OTHER INFORMATION: strain: W115
266 <220> FEATURE:
267 <223> OTHER INFORMATION: NEC1 promoter
269 <400> SEQUENCE: 7

RAW SEQUENCE LISTING DATE: 05/02/2002
PATENT APPLICATION: US/09/743,885A TIME: 17:07:38

Input Set : A:\743885seq.mar.txt
Output Set: N:\CRF3\05022002\I743885A.raw

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/743,885A

DATE: 05/02/2002
TIME: 17:07:39

Input Set : A:\743885seq.mar.txt
Output Set: N:\CRF3\05022002\I743885A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:16; N Pos. 12,15

Seq#:17; N Pos. 9